Serial No.: 10/585,606 Filed: May 17, 2007

Page : 2 of 8

Amendments to the Claims:

Please amend claims 26, 31 and 39 as follows. Please cancel claim 30 without prejudice to continued prosecution. The claims and their status are shown below.

1-25. (Canceled)

26. (Currently amended) A wound covering, wherein said wound covering comprises a first layer and a second layer,

wherein said first layer comprises an absorbent matrix having a surface and an anti-microbially active substance, wherein said anti-microbially active substance is chemically or physically bonded to said surface, wherein the anti-microbially active substance is a metal, wherein said metal is in the form of clusters or a metal compound, wherein said surface and said substance are coated with further comprises a hydrophilic polymer,

wherein said second layer comprises a gas-permeable, liquid-impermeable film and a self-adhesive first area, wherein said second layer further comprises a second area, wherein said first area surrounds said second area,

wherein said matrix is connected to said film in said second area, wherein said wound covering adheres to human or animal skin by means of said self-adhesive first area, wherein the adherence forms a liquid-tight inner space into which a liquid can be deposited.

- 27. (Previously presented) The wound covering as claimed in claim 26, wherein said matrix has at least one fiber or is formed from at least one fiber and wherein the anti-microbially active substance is bound to a surface of said fiber.
- 28. (Previously presented) The wound covering as claimed in claim 27, wherein said anti-microbially active substance is bound exclusively to the surface of said matrix or said fiber.
- 29. (Previously presented) The wound covering as claimed in claim 26, wherein the antimicrobially active substance is selected from the group consisting of silver, copper, zinc, a mixture of silver, copper and zinc, and a mixture or alloy comprising at least one of these components.
 - 30. (Canceled)
- 31. (Currently amended) The wound covering as claimed in claim <u>26</u> [[30]], wherein said clusters of said metal or metal compound is applied to said matrix surface by evaporation and deposition, by a sputtering process, or by chemical vapor deposition.

Serial No.: 10/585,606 Filed: May 17, 2007

Page : 3 of 8

32. (Previously presented) The wound covering as claimed in claim 26, wherein the antimicrobially active substance has a mean particle size of 5 to 100 nm.

- 33. (Previously presented) The wound covering as claimed in claim 26, wherein the antimicrobially active substance is present in a layer having a mean thickness of 5 to 100 nm.
- 34. (Previously presented) The wound covering as claimed in claim 26, wherein the antimicrobially active substance is present in an amount which is anti-microbially active upon thorough soaking of the matrix with a liquid in the matrix.
- 35. (Previously presented) The wound covering as claimed in claim 26, wherein the hydrophilic polymer is a polymer that decreases the adhesion of bacteria to said matrix.
- 36. (Previously presented) The wound covering as claimed in claim 35, wherein the bacteria is a gram-negative bacteria.
- 37. (Previously presented) The wound covering as claimed in claim 36, wherein the bacteria is *Staphylococcus epidermidis*.
- 38. (Previously presented) The wound covering as claimed in claim 26, wherein said surface of said matrix is coated with said hydrophilic polymer by means of plasma polymerization.
- 39. (Currently amended) The wound covering as claimed in claim <u>26</u> [[38]], wherein the hydrophilic polymer is oxidized after plasma polymerization.
- 40. (Previously presented) The wound covering as claimed in claim 26, wherein said hydrophilic polymer is formed from monomers based on acrylic acid or from monomers based on siloxane.
- 41. (Previously presented) The wound covering as claimed in claim 40, wherein said siloxane is hexamethyldisiloxane.
- 42. (Previously presented) The wound covering as claimed in claim 26, wherein the hydrophilc polymer is present in a layer having a mean thickness of 5 to 500 nm.
- 43. (Previously presented) The wound covering as claimed in claim 26, wherein the antimicrobially active substance is present in an amount in which an amount of active compounds not acting cytotoxically on a wound is formed and/or released by said substance.
- 44. (Previously presented) The wound covering as claimed in claim 26, wherein said matrix further comprises one or more substances that assist wound healing.

Serial No.: 10/585,606 Filed: May 17, 2007

Page : 4 of 8

45. (Previously presented) The wound covering as claimed in claim 44, wherein said one or more substances that assist wound healing are growth factors.

- 46. (Previously presented) The wound covering as claimed in claim 26, wherein said matrix is thoroughly soaked or impregnated with a liquid that assists in wound healing.
- 47. (Previously presented) The wound covering as claimed in claim 46, wherein said liquid is an acidic liquid or a liquid comprising nutrients.
- 48. (Previously presented) The wound covering as claimed in claim 26, wherein said film is transparent.
- 49. (Previously presented) The wound covering as claimed in claim 26, wherein said wound covering is transparent to light.
- 50. (Previously presented) The wound covering as claimed in claim 49, wherein said light is UV light, IR light, or NIR light.
- 51. (Previously presented) The wound covering as claimed in claim 26, wherein said wound covering further comprises an indicator.
- 52. (Previously presented) The wound covering as claimed in claim 51, wherein said indicator is a pH indicator.
- 53. (Previously presented) The wound covering as claimed in claim 51, wherein the indicator is a sensor.
- 54. (Previously presented) The wound covering as claimed in claim 53, wherein said sensor is a biosensor.
- 55. (Previously presented) The wound covering as claimed in claim 53, wherein the sensor is a conductive polymer which changes its conductivity depending on the state of the wound or wound covering.
- 56. (Previously presented) The wound covering as claimed in claim 51, wherein said indicator indicates the liquid content of said matrix.
- 57. (Previously presented) The wound covering as claimed in claim 51, wherein the indicator indicates the degree and/or type of a microbial contamination of said matrix or of a wound.
- 58. (Previously presented) The wound covering as claimed in claim 51, wherein the indicator indicates an inflammatory status of a wound.

Serial No.: 10/585,606 Filed: May 17, 2007

Page : 5 of 8

59. (Previously presented) A process for the production of the wound covering as claimed in claim 26, comprising the following steps:

providing an absorbent matrix,

providing a gas-permeable but liquid-impermeable film,

applying a self-adhesive first area on or to said film,

connecting said absorbent matrix to said film in a second area of said film, wherein the first area surrounds the second area,

depositing an anti-microbially active substance onto said matrix, wherein said depositing is by evaporation and deposition, by a sputtering process or by chemical vapor deposition, and

depositing a hydrophilic polymer onto said matrix, wherein said depositing is by plasma polymerization.